

**ABSTRACT**

An epitaxial growth apparatus comprises a process chamber of silica glass, and a wafer support disposed within the chamber. Halogen lamps are disposed below and above the process chamber, and are adapted to heat a semiconductor wafer supported by the wafer support. The wafer support comprises a susceptor for mounting the wafer, and a susceptor support shaft for supporting the susceptor from thereunder. Arms for supporting the susceptor by three points radially extend from the main shaft of the susceptor support shaft. Since the center portion of the lower surface of susceptor has no supporting protrusion, the heat directed toward the center portion of susceptor from the lower halogen lamps is not inhibited, whereby the semiconductor wafer is heated uniformly. Hence, a silicon film having a uniform thickness can be obtained when a normal epitaxial growth process is carried out.

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